

Norman H. Bangerter Governor Suzanne Dandoy, M.D., M.P.H. Executive Director Kenneth L. Alkema

## DEPARTMENT OF HEALTH DIVISION OF ENVIRONMENTAL HEALTH

Bureau of Water Pollution Control 288 North 1460 West, P.O. Box 16690 Salt Lake City, Utah 84116-0690 (801) 538-6146



April 7, 1989

OIL, GAS & MINING

William T. Thurman, Esq. McKay, Burton and Thurman Suite 1200 Kennecott Building Salt Lake City, Utah 84133

Re: B.P. Minerals

Barney's Canyon Project

Dear Mr. Thurman:

We have reviewed your letters of 21 March 1989 and 28 March 1989.

The design of the Barney's Canyon Project has been approved following over one year of rigorous review by the Bureau of Water Pollution Control (the Bureau) and the Salt Lake City/County Health Department. The criteria for the design are based upon the most current information and concepts available to the Bureau. The requirements for liner systems for the heap leach pads, process ponds, process plant area and process piping trenches, included in our 24 March 1989 construction permit, are intended to provide the best possible protection for surface and ground waters.

The safeguards included in the pad and pond design to accomplish this purpose are a high density polyethylene (flexible membrane) liner, a secondary clay liner, and a leak detection system. This system is designed for the containment of all process fluids containing cyanide or other process chemicals, and therefore, should protect both surface and ground waters.

An operation and maintenance manual and contingency plan will be submitted for review and approval prior to initiating operations. The manual will define standard operational procedures that are consistent with the design criteria and to minimize potential operational problems. The contingency plan will define the most probable failure scenarios, establish effective and rapid response actions, and define manpower and resource requirements.

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The project is well designed, and we will make every effort to ensure that it is constructed in accordance with quality assurance and inspection requirements to meet the design criteria. As we have indicated before, our files are open for your review should you desire to make your own determination of the adequacy of this system.

Sincerely,

Don A. Ostler, P.E. Executive Secretary

**Utah Water Pollution Control Committee** 

CGD/ag

cc: Mr. Blaine Milner, Chairman, Copperton Improvement District

Fred Nelson, Esq., Assistant Attorney General

Mr. R.J. Ramsey, General Manager, Barney's Canyon

Ms. Cindy Emmons, B.P. Minerals

Mr. L.J. Jacobsen, Barney's Canyon Gold project

Mr. Kent Miner, Salt Lake City/County Health Department

Mr. Lowell Braxton, Oil, Gas and Mining

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